#### **Chapter VIII**

#### ANTICIPATED GROWTH AND CHANGE

In any planning effort, forecasts are required of those future events and conditions which are outside the scope of the plan but which will affect plan design and implementation. In the preparation of the Waukesha County development plan, in particular, the future demand for land and natural resources which the plan must seek to accommodate depends primarily upon future resident population and economic activity levels. Control of changes in population and economic activity levels lies largely outside the scope of governmental activity and outside the scope of the physical planning process. Future population and economic activity levels must, therefore, be forecast.

In more than three decades of long-range land use and related facility planning, the Regional Planning Commission has undertaken a number of studies of population and economic activity. The majority of these studies have been carried out within the context of the traditional approach to long-range, areawide systems planning. The traditional practice has been to prepare a number of alternative projections of possible future population and economic activity levels, selecting from these projections one set of forecast population and economic activity levels believed to be most likely to represent future conditions. The selected forecasts are then utilized in the development, test, and evaluation of alternative land use and supporting facility plans.

The traditional approach to the preparation of population and economic activity forecasts works well in periods of socio-economic stability, when historic trends can be anticipated to continue relatively unchanged over the plan design period. However, during periods of major change in social and economic conditions, when there is uncertainty as to whether historic trends may be expected to continue, an alternative to this traditional approach may be required. Surveillance activities carried out under the continuing regional planning program point to increasing uncertainty with regard to future social and economical conditions in Southeastern Wisconsin. To deal with this uncertainty, the Commission has adopted an "alternative"

futures" approach to areawide, systems-level planning. This approach involves the postulation of alternative future growth scenarios for the Region and the preparation of related projections of population and employment at the Region and County level, thereby providing a broader basis for plan design and evaluation.

Information regarding the possible future population and economic activity levels in the Region and Waukesha County to the year 2010, developed by the Commission using the alternative futures approach, is presented in SEWRPC Technical Report No. 10 (2nd Edition), The Economy of Southeastern Wisconsin, 1984, and SEWRPC Technical Report No. 11 (2nd Edition), The Population of Southeastern Wisconsin, 1984. This chapter brings forward from those two reports information regarding possible future population and economic activity levels which has a direct bearing on the preparation of a Waukesha County development plan. The first section of this chapter describes in a qualitative manner the regional growth scenarios postulated by the Commission in conjunction with the alternative futures planning approach. The second section of this chapter sets forth the range of population. household, and employment levels envisioned for Waukesha County under the alternative growth scenarios considered. The third section of the chapter describes the manner in which forecast population, household, and employment levels are to be used in the preparation of the County development plan.

#### ALTERNATIVE FUTURE GROWTH SCENARIOS

Under the alternative futures approach, three alternative future growth scenarios were postulated for Southeastern Wisconsin. The sets of conditions postulated for each "future" were intended to represent internally consistent, reasonable scenarios of future changes in resident population and economic activity levels in the Region through the year 2010. Two scenarios, the "high-growth" scenario and the "low-growth" scenario, were intended to represent reasonable extremes, while the third scenario, the

"intermediate-growth" scenario, was intended to represent a likely future.

#### Economic Growth Scenarios

The economic changes that were assumed under a high-growth scenario represented a return to the type of growth that has historically occurred in the regional economy. Under this scenario, there would be no long-term damage to the regional economy as a result of the 1979 through 1983 recession and the economic recovery of the Region would be strong after 1985, with long-term growth rates recovering to levels at or slightly below national averages.

Under the intermediate-growth scenario, the recovery of the regional economy from the 1979 through 1983 recession was assumed to be delayed and initially weaker than the national recovery as the heavy industrial and manufacturing companies that historically dominated the regional economy continued to close unprofitable plants and limit operations in the restructuring efforts necessary for survival during poor economic conditions.

The economic conditions that were assumed under a low-growth scenario represented a departure from long-term trends under which the Region was able to maintain or increase its relative share of national employment. Under the low-growth scenario, the recovery of the regional economy from the 1979 through 1983 recession was assumed to be a lengthy one, with regional employment remaining depressed for a decade.

Figures 84 and 85 show, respectively, historic and projected manufacturing and service employment levels in the Region and Waukesha County under high, intermediate, and low-growth scenarios. As shown on Figure 84, projected 2010 manufacturing employment in the Region under the intermediate-growth scenario would total about 353,000 jobs, about 91,000 jobs, or about 35 percent, more jobs than 1980 levels. Manufacturing employment in the Region could, however, total 427,000 jobs, about 165,000 jobs, or 63 percent, above 1980 levels, under

'The "high-growth," "intermediate-growth," and "low-growth" scenarios as described in this chapter are equivalent to the "optimistic," "intermediate," and "pessimistic" regional growth scenarios, respectively, described in SEWRPC Technical Report No. 10 (2nd Edition), The Economy of Southeastern Wisconsin, 1984, and SEWRPC Technical Report No. 11 (2nd Edition), The Population of Southeastern Wisconsin, 1984.

the high-growth scenario, and about 289,000 jobs, about 17,000 jobs, or 10 percent, over 1980 levels, under the low-growth scenario. Projected 2010 manufacturing employment in Waukesha County under the intermediate-growth scenario would total about 75,000 jobs, about 42,000 jobs, or about 126 percent, more jobs than 1980 levels. Manufacturing employment in the County could total 92,000 jobs, about 58,700 jobs, or 177 percent, above 1980 levels, under the high-growth scenario, and about 73,000 jobs, about 40,000 jobs, or 120 percent over 1980 levels, under the low-growth scenario.

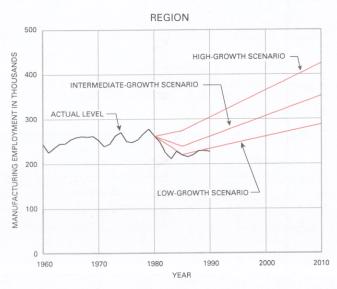
As shown on Figure 85, projected 2010 service employment in the Region under the intermediategrowth scenario would total about 336,000 jobs. about 178,000 jobs, or about 112 percent, more jobs than 1980 levels. Service employment in the Region could, however, total 407,000 jobs, about 250,000 jobs, or 157 percent, above 1980 levels, under the high-growth scenario, and about 274,000 jobs, about 116,000 jobs, or 73 percent, over 1980 levels, under the low-growth scenario. Projected 2010 service employment in Waukesha County under the intermediate-growth scenario would total about 63,000 jobs, about 42,000 jobs, or about 211 percent, more jobs than 1980 levels. Service employment in the County could total 86,000 jobs, about 66,000 jobs, or 323 percent, above 1980 levels, under the highgrowth scenario, and about 58,000 jobs, about 38,000 jobs, or 186 percent, over 1980 levels, under the low-growth scenario.

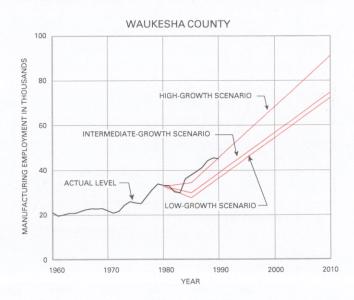
#### Population Growth Scenarios

The population of an area is constantly changing as a result of births, deaths, and the migration of persons into, or out of, the area. Area population projections may be prepared through explicit consideration of these components of population change. The process of developing alternative population growth scenarios for Southeastern Wisconsin and Waukesha County involved a review of critical social and economic factors that may be expected to impact on mortality, fertility, and migration rates through the year 2010 and the establishment of a reasonable range of values for each component of population change. Each of the three population growth scenarios developed by the Commission reflects a combination of assumed fertility, mortality, and migration rates selected from the range of possible values. The assumed combinations of fertility, mortality, and migration rates were ultimately used to project the size of the population of the Region under a range of possible future conditions.

Figure 84

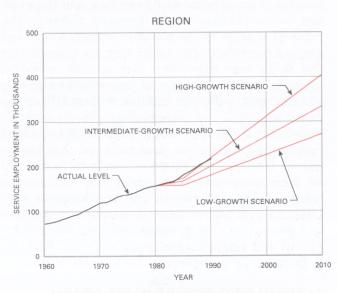
## HISTORIC AND PROJECTED MANUFACTURING EMPLOYMENT IN THE REGION AND WAUKESHA COUNTY: 1960-2010

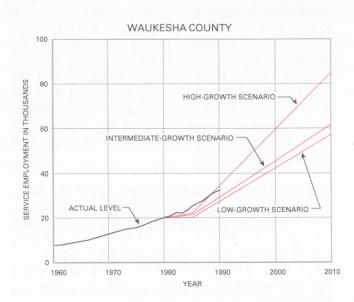




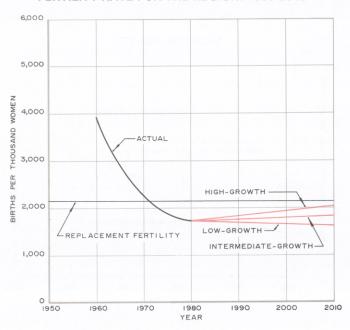
Source: U. S. Bureau of Economic Analysis and SEWRPC.

Figure 85
HISTORIC AND PROJECTED SERVICE EMPLOYMENT IN THE REGION AND WAUKESHA COUNTY: 1960-2010





Source: U. S. Bureau of Economic Analysis and SEWRPC.



Source: U. S. Bureau of the Census and SEWRPC.

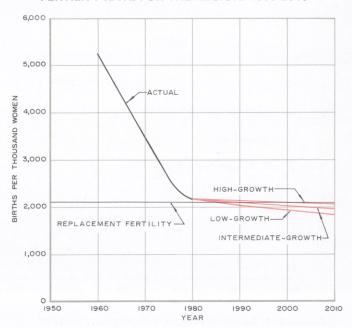
Among the population growth scenarios, the highest fertility rates were assumed for the high-growth scenario and the lowest fertility rates for the low-growth scenario (see Figures 86 and 87). The overall range between the low and high fertility rates was relatively narrow, a joint product of changing societal preferences regarding the family size, the increased availability of family planning, and the effectiveness of birth control. With regard to the other determinant of natural increase in population, mortality rates, it should be noted that the same set of mortality rates was assumed for each population growth scenario.

The rates of migration assumed under the highgrowth, intermediate-growth, and low-growth scenarios were logically linked to anticipated economic conditions, taking into account the number of jobs, unemployment rate, rate of dual job holding, and labor force participation rates envisioned under the corresponding economic growth scenarios (see Figure 88).

The varying assumptions regarding rates of natural increase and net migration described above lead to significantly different scenarios of population change in the Region and in Waukesha County.

Figure 87

### HISTORIC AND PROJECTED NONWHITE TOTAL FERTILITY RATE FOR THE REGION: 1960-2010



Source: U. S. Bureau of the Census and SEWRPC.

Accompanying the changes in the size of the population would be changes in the number, size, and type of households. Under each growth scenario, the number of households would increase and the average household size would decrease, although the rates of change in the number of households and average household size would vary considerably for the three scenarios. The high-growth scenarios assumes that the "traditional" household consisting of a husband, wife, and children will constitute the dominant type. The intermediate-growth scenario assumes that the "traditional" patterns of household composition will be less dominant and that singleparent families and single-person households will be more prevalent than under the high-growth scenario. The low-growth scenario assumes that husband-wife households will continue to decrease as a proportion of total households and that singleparent and single-person households will continue to increase as a proportion of total households.

# ALTERNATIVE FUTURE POPULATION, HOUSEHOLD, AND EMPLOYMENT LEVELS

SEWRPC Technical Report No. 10 (2nd Edition), The Economy of Southeastern Wisconsin, 1984, and SEWRPC Technical Report No. 11 (2nd Edition),